# YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT 1947 Galileo Court, Suite 103; Davis, CA 95618 (530) 757-3650

# TITLE V PERMIT STATEMENT OF BASIS ADDENDUM

PERMIT NUMBER: F-00454-17

ENGINEER: Nancy Fletcher

DATE: 7/22/10

**Facility Name:** University of California, Davis **Mailing Address:** Environmental, Health & Safety

One Shields Avenue Davis, CA 95616-8586

Location: Davis, CA 95616-8586

**Responsible Official:** Carl J. Foreman

Title: Director, Environmental Health & Safety

**Application Contact:** Aimee J. Pfohl

Title: Environmental Protection Specialist

**Phone:** (530) 754-5267

#### I. FACILITY DESCRIPTION

Campus operations related to heating and cooling (energy), wastewater treatment, landfill, standby energy and water pumping, incineration, dryer/dehydrator for fruits and nuts, nut hulling, feed processing, gasoline, aviation gasoline storage and dispensing, coating operations, woodworking operations, sand and bead blasting operations, and various particulate emitting processes.

#### II. PROPOSED REVISIONS

The facility is proposing a significant Title V Permit modification for the installation of three new emission units. The first proposed unit, P-42-10, is a diesel engine for emergency power generation located at UC Davis Building J-1(District Authority to Construct application C-10-17). The second proposed new emission unit, P-43-10, is for a natural gas engine for emergency power generation located at Robbins Hall (District Authority to Construct application C-10-38), The third proposed emission unit, P-44-10, is for a diesel engine for emergency power generation located at CNPRC-Butler Building (District Authority to Construct application C-10-45). In addition, this modification will remove three cancelled Permits to Operate (PTOs) P-210-95(a), P-53-99 and P-54-99 from the Title V Operating Permit.

The facility is currently operating under Title V Operating Permit F-00454-5, effective March 20, 2006. Since the issuance of F-00454-5, there have been multiple significant Title V Permit modification proposals due to various new and modified emission units proposed by the facility. The table below summarizes the facility's Title V Permit revision proposals since the issuance of F-00454-5, including the current proposal.

Revision	Date of EPA Notice	Affected Emission Units		
F-00454-6	July 5, 2006	P-8-01(a) / C-06-16 P-9-01(a) / C-06-15 P-50-99(a) / C-06-17 P-51-99(a) / C-06-18 P-52-99(a) / C-06-19 P-115-03 / C-03-98 P-117-03 / C-02-373 P-118-03 / C-03-164 P-119-03 / C-02-372 P-120-03 / C-03-99 P-121-03 / C-03-100 P-59-05 / C-05-175 P-36-06 / C-05-146* P-37-06 / C-05-147*		
F-00454-7	September 5, 2006	P-63-06 / C-06-80 P-64-06 / C-06-97		
F-00454-8	November 6, 2006	P-83-06 / C-05-237 P-84-06 / C-06-148*		
F-00454-9	March 7, 2007	P-22-00(a) / C-06-142 P-17-07 / C-07-15*		
F-00454-10	March 11, 2007	P-49-07 / C-07-62 P-50-07 / C-07-78 P-51-07 / C-07-80 P-52-07 / C-07-84* P-53-07 / C-07-85* P-59-07 / C-07-107*		
F-00454-11	November 9, 2007  P-95-80(a1) / C-07-25  P-1-81(a2) / C-07-44  P-54-90(a) / C-07-105  P-94-07 / C-07-158			
F-00454-12	March 11, 2008	P-56-96(a)/C-07-123 P-16-08/C-07-150*		
F-00454-13 November 19, 2008		P-67-00(a)/C-08-61 P-1-09/C-08-96 P-84-93(a1)/C-08-97 P-2-09/C-08-110 P-3-09/C-08-193 P-4-09/C-08-232 P-42-76(a3)/C-08-250		

F-00454-14	March 17, 2009	P-83-06/C-05-237 P-3-00/C-99-107 P-4-09/C-08-232(revised) P-16-09/C-08-254 P-17-09/C-09-16 P-42-76(a2)/C-09-57 P-1-09/C-08-96(cancelled) P-94-07/C-07-158(cancelled)
F-00454-15	August 12, 2009	P-54-09/C-09-139 P-66-09/C-09-127 P-67-09/C-09-128 P-68-09/C-09-129 P-69-09/C-09-161 P-92-00(cancelled) P-65-96(cancelled) P-66-96 (cancelled) P-115-95(a)(cancelled) P-116-95(a)(cancelled) P-106-95(a)(cancelled) P-106-95(a)(cancelled)
F-00454-16	NA	P-63-06(a)/C-09-210 P-49-96(a)(cancelled) P-53-00(cancelled) P-53-90(cancelled)
F-00454-17	NA	P-42-10/C-10-17 P-43-10/C-10-38 P-44-10/C-10-45 P-210-95(a)(cancelled) P-53-99(cancelled) P-54-99(cancelled)

<sup>\*</sup>Note: P-36-06, P-37-06, P-84-06, and P-17-07 have been removed and replaced with P-52-07, P-53-07, P-59-07, and P-16-08 respectively.

This Title V Permit Statement of Basis Addendum reflects the Title V Permit modifications proposed in District Authority to Construct (ATC) applications C-10-17, C-10-38 and C-10-45. Emission units that are not affected by the proposed changes were evaluated in the original Statement of Basis or previous addendums (including the significant Title V Permit modifications evaluated in Title V Permit Statement of Basis Addendums F-00454-6, F-00454-7, F-00454-8, F-00454-9, F-00454-10, F-00454-11, F-00454-12, F-00454-13, F-00454-14 and F-00454-15 and minor modification F-00454-16).

# III. SIGNIFICANT EMISSION UNIT INFORMATION

The emission units have been installed pursuant to issuance of authorities to construct in accordance with District Rules 3.1 and 3.4.

**Identification Number:** P-42-10

Equipment Description: 315 BHP diesel fired John Deere IC engine, Model No.

6068HF485, Serial No. TBD, Model Year 2010, EPA Certified

Tier III Engine

Control Equipment: Aftercooler and turbocharger

**Identification Number:** P-43-10

Equipment Description: 97.5 BHP natural gas fired Ford IC engine, Model No. WSG-

1068, Serial No. TBD, Model Year 2010

Control Equipment: Catalytic convertor

Identification Number: P-44-10

Equipment Description: 896 BHP diesel fired MTU Detroit Diesel IC engine,

Model No. 12V1600G8OS, Serial No. TBD, Model Year

2010, EPA Certified Tier II Engine

Control Equipment: Aftercooler and turbocharger

# IV. TITLE V APPLICABILITY

The facility's total potential to emit exceeds the Major Stationary Source threshold of 25 tons per year of VOC and  $NO_x$  and 100 tons per year of CO and is subject to the requirements of District Rule 3.8. Criteria pollutant emissions from the emission units affected by the proposed significant Title V Permit modification are presented below:

Criteria Pollutant Emissions (tons per year)							
Emission Unit ID Number	VOC	CO	NO <sub>x</sub>	SO <sub>x</sub>	$PM_{10}$		
P-42-10	Neg.	0.03	0.19	Neg.	Neg.		
P-43-10	Neg.	0.02	Neg.	Neg.	Neg.		
P-44-10	0.04	0.18	0.87	Neg.	0.03		
Previous Facility Total*	31.49	461.02	156.55	7.86	20.72		
New Facility Total**	29.73	424.95	156.41	7.82	20.67		

<sup>\*</sup>After the significant and minor Title V permit modifications proposed in permit revisions F-00454-6 through F-00454-16 (includes emissions from cancelled units P-210-95(a), P-53-99 and P-54-99).

<sup>\*\*</sup>Includes the significant and minor Title V permit modifications proposed in permit revisions F-00454-6 through F-00454-17.

# V. APPLICABLE FEDERAL REQUIREMENTS

## **RULE 2.3** Ringelmann Chart

# **Rule Description**

\_This rule specifies the allowable opacity limit for sources in the District. The version of the rule used in this evaluation was adopted on January 13, 2010 and has been submitted as a revision to the current California State Implementation Plan (SIP).

# **Compliance Status**

The rule applies to all emission units at the stationary source. The source is currently in compliance with the rule.

# Requirement

The Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is:

- a. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
- b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection a. of this permit condition. [District Rule 2.3]

#### **RULE 2.5** Nuisance

# Rule Description

This rule requires that sources are not a public nuisance. The version of the rule used in this evaluation was adopted on October 1, 1971 and is part of the current California SIP.

#### **Compliance Status**

The rule applies to all emission units at the stationary source. The source is currently in compliance with the rule.

#### **Permit Condition**

The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property.

[The permit condition is federally enforceable because it derives from District Rule 2.5 - Nuisance which is currently part of the California SIP. The District is taking steps to remove District Rule 2.5 from the SIP. Once the U.S. Environmental Protection Agency (EPA) has taken final action to

remove District Rule 2.5 from the SIP, this permit condition will become State-enforceable only.]

#### **RULE 2.11** Particulate Matter

# **Rule Description**

This rule specifies the allowable particulate matter emission rate at standard conditions. The version of the rule used in this evaluation was amended on January 13, 2010 and has been submitted as a revision to the current California State Implementation Plan (SIP).

# **Compliance Status**

The rule applies to P-42-10, P-43-10 and P-44-10 and the source is currently in compliance with the rule.

# Requirement

The Permit Holder shall not discharge into the atmosphere from any single source of emission, particulate matter in excess of 0.1 grains per cubic foot of exhaust volume as calculated at standard conditions.

# **Streamlining Demonstration**

The requirements of the rule can be streamlined by conditions required by District Rule 3.4, New Source Review. The streamlining demonstration is shown below:

## P-42-10

The District Rule 3.4 requirement for P-42-10 is 1.0 lb/day PM. The maximum particulate matter in the exhaust is calculated below using the engine's rated exhaust flow of 498.3 dry standard cubic feet per minute (dscfm):

Grains per cubic foot of exhaust volume = 1.0 lb/day \* day/24 hour \* 7000 grains/lb \* hr/60 min.\* min./498.3 dscf = 0.01 grains/dscf

#### P-43-10

The District Rule 3.4 requirement for P-43-10 is 0.2 lb/day PM. The maximum particulate matter in the exhaust is calculated below using the engine's rated exhaust flow of 119.7 dry standard cubic feet per minute (dscfm):

Grains per cubic foot of exhaust volume = 0.2 lb/day \* day/24 hour \* 7000 grains/lb \* hr/60 min. \* min./119.7 dscf = 0.01 grains/dscf

#### P-44-10

The District Rule 3.4 requirement for P-44-10 is 6.6 lb/day PM. The maximum particulate matter in the exhaust is calculated below using the engine's rated exhaust flow of 1,762.4 dry standard cubic feet per minute (dscfm):

Grains per cubic foot of exhaust volume = 6.6 lb/day \* day/24 hour \* 7000 grains/lb \* hr/60 min.\* min./1,762.4 dscf = 0.02 grains/dscf The District Rule 2.11 requirement is streamlined by the District Rule 3.4 requirements.

#### **RULE 2.12** Specific Contaminants

# **Rule Description**

This rule specifies the allowable sulfur dioxide and particulate matter combustion contaminant emission rates at standard conditions. The version of the rule used in this evaluation was amended on January 13, 2010 and has been submitted as a revision to the current California State Implementation Plan (SIP).

# **Compliance Status**

The rule applies to P-42-10, P-43-10 and P-44-10. The source is currently in compliance with the rule.

### Requirement

The Permit Holder shall not release or discharge into the atmosphere from any single source a). sulfur dioxide in excess of 0.2 percent by volume; b). particulate matter in excess of 0.3 grains per cubic foot of exhaust volume as calculated to standard conditions.

# **Streamlining Demonstration**

The requirements of the rule can be streamlined by conditions required by District Rule 3.4, New Source Review. The streamlining demonstration for particulate matter was shown in the previous rule (Rule 2.11) and the streamlining demonstrations for sulfur dioxide is shown below:

#### P-42-10

The District Rule 3.4 requirement for P-42-10 is 0.1 lb/day SOx. The Maximum SOx in the exhaust is calculated below using the engine's rated exhaust flow of 498.3 dry standard cubic feet per minute (dscfm):

= 0.1 lb/day \* day/24 hours \* 385 scf/lb-mol \* lb-mol/64lb \* hr/60min \* min/498.3 dscf \* 100% = 0.0001%

# P-43-10

The District Rule 3.4 requirement for P-43-10 is 0.3 lb/day SOx. The Maximum SOx in the exhaust is calculated below using the engine's rated exhaust flow of 119.7 dry standard cubic feet per minute (dscfm):

= 0.3 lb/day \* day/24 hours \* 385 scf/lb-mol \* lb-mol/64lb \* hr/60min \* min/119.7 dscf \* 100% = 0.0001%

#### P-44-10

The District Rule 3.4 requirement for P-44-10 is 0.3 lb/day SOx. The Maximum SOx in the exhaust is calculated below using the engine's rated exhaust flow of 1762.4 dry standard cubic feet per minute (dscfm):

= 0.3 lb/day \* day/24 hours \* 385 scf/lb-mol \* lb-mol/64lb \* hr/60min \* min/1762.4 dscf \* 100% = 0.001%

For emission units P-42-10, P-43-10 and P-44-10 the District Rule 2.12 requirement is streamlined by the District Rule 3.4 requirements.

# **RULE 2.17** Circumvention

# **Rule Description**

This rule prevents sources from concealing emissions to the atmosphere. The version of the rule used in this evaluation was adopted on October 1, 1971 and is part of the current California SIP.

# **Compliance Status**

The rule applies to all emission units at the stationary source. The source is currently in compliance with the rule.

# **Permit Condition**

The Permit Holder shall not build, erect, install or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26, Part 3 and Part 4 of the Health and Safety Code of the State of California or District Rules or Regulations. [District Rule 2.17]

# **RULE 2.19** Particulate Matter Process Emission Rate

# **Rule Description**

This rule limits the pound per hour particulate matter emission rate based on the amount of material processed. The version of the rule used in this evaluation was adopted on October 1, 1971 and is part of the current California SIP.

# **Compliance Status**

Emission units P-42-10, P-43-10 and P-44-10 are exempt from the requirements of the rule pursuant to District Rule 2.19, §a. which requires the use of District Rule 1.1, §225 to define process weight. District Rule 1.1, §225 states that "Solid Fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not." The source is currently in compliance with the rule.

#### **Permit Condition**

No permit conditions are required.

# **RULE 2.32** Stationary Internal Combustion Engines

#### **Rule Description**

The purpose of the rule is to limit emissions of nitrogen oxides (NOx) and carbon monoxides (CO) from stationary internal combustion engines. The rule applies to any stationary internal combustion engines rated at more than 50 brake horsepower, operated on any gaseous fuel, including liquid petroleum gas, or diesel fuel. The rule shall not apply to engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl or animals. The version of the rule used in this evaluation was adopted on October 10, 2001 and is part of the current California SIP.

#### **Compliance Status**

P-42-10, P-43-10 and P-44-10 are exempt from all requirements of Rule 2.32, except Section 503, pursuant to sections 110.2 and 110.3 of Rule 2.32.

# **Streamlining Demonstration**

Section 503 of Rule 2.32 requires that all records be retained for a period of two (2) years. The District Rule 3.8, Federal Operating Permits requirement of Section 302.6.b requires records be retained for a period of five (5) years.

The record-keeping requirements of Rule 2.32 have been streamlined by the Rule 3.8 requirement.

# **RULE 3.1** General Permit Requirements

# **Rule Description**

The purpose of this rule is to provide an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits. The version of the rule used in this evaluation was adopted on February 23, 1994 and is part of the current California SIP.

## **Compliance Status**

The rule applies to all emission units at the stationary source. The source is currently in compliance with the rule.

# **Permit Conditions**

No person shall build, erect, alter, or replace any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, without first obtaining an authorization to construct from the Air Pollution Control Officer as specified in Section 401 of District Rule 3.1. [District Rule 3.1, §301.1]

No person shall operate any facility, article, machine, equipment, or other contrivance, for which an authorization to construct is required by District Rules and Regulations without first obtaining a written permit from the Air Pollution Control Officer. [District Rule 3.1, §302.1]

No person shall operate any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or

control the issuance of air contaminants, without obtaining a permit from the Air Pollution Control Officer or the Hearing Board. [District Rule 3.1, §302.2]

The owner or operator of any facility, article, machine, equipment, or other contrivance for which a permit to operate is in effect shall notify the District office whenever a breakdown, malfunction, or operational upset condition exists which would tend to increase emissions of air pollutants or whenever any operating condition contrary to any provision of the permit to operate exists. Such notice shall be given to the District no later than four hours after occurrence during regular workday hours or no later than two hours of the District workday following an occurrence not during regular District workday hours. The notice shall provide the District information as to causes and corrective action being taken, with a schedule for return to required operating conditions. [District Rule 3.1, §405.3]

#### **RULE 3.4** New Source Review

# **Rule Description**

This rule applies to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which are subject to Rule 3.1, General Permit Requirements, and which, after construction or modification, emit or may emit any affected pollutants. This rule shall not apply to prescribed burning of forest, agriculture or range land, road construction or any other non-point source common to timber harvesting or agricultural practices. The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards. The version of the rule used in this evaluation was adopted on August 13, 1997 and is part of the current California SIP.

## **Compliance Status**

The source has satisfied the provisions of New Source Review. The New Source Review requirements were imposed on the most recent Authorities to Construct (ATC) issued to the source. The New Source Review Requirements are shown below.

### **Emission Limitations**

#### P-42-10

VOC emissions shall not exceed 0.8 lb/day, 7 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-17]

CO emissions shall not exceed 7.2 lb/day,  $60 \text{ lb/1}^{\text{st}}$ ,  $2^{\text{nd}}$ ,  $3^{\text{rd}}$ , and  $4^{\text{th}}$  calendar quarter, and 0.03 tons/year. [District Rule 3.4/C-10-17]

NOx emissions shall not exceed 45.2 lb/day, 376 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.19 tons/year. [District Rule 3.4/C-10-17]

SOx emissions shall not exceed 0.1 lb/day,  $1 \text{ lb/1}^{\text{st}}$ ,  $2^{\text{nd}}$ ,  $3^{\text{rd}}$ , and  $4^{\text{th}}$  calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-17]

PM10 emissions shall not exceed 1.0 lb/day, 8 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-17]

#### P-43-10

VOC emissions shall not exceed 0.2 lb/day, 2 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-38]

CO emissions shall not exceed 5.2 lb/day, 43 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.02 tons/year. [District Rule 3.4/C-10-38]

NOx emissions shall not exceed 0.7 lb/day, 6 lb/1 $^{st}$ ,  $2^{nd}$ ,  $3^{rd}$ , and  $4^{th}$  calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-38]

SOx emissions shall not exceed 0.3 lb/day, 2 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-38]

PM10 emissions shall not exceed 0.2 lb/day, 2 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-38]

#### P-44-10

VOC emissions shall not exceed 10.4 lb/day, 87 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.04 tons/year. [District Rule 3.4/C-10-45]

CO emissions shall not exceed 43.6 lb/day, 363 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.18 tons/year. [District Rule 3.4/C-10-45]

NOx emissions shall not exceed 207.6 lb/day, 1,730 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.87 tons/year. [District Rule 3.4/C-10-45]

SOx emissions shall not exceed 0.3 lb/day, 2 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and negligible tons/year. [District Rule 3.4/C-10-45]

PM10 emissions shall not exceed 6.6 lb/day, 55 lb/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.03 tons/year. [District Rule 3.4/C-10-45]

# **Work Practice and Operational Requirements - Throughput Limitations**

### P-42-10

The maximum amount of diesel consumption shall not exceed 326 gallons/day, 2,720 gallons/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 2,720 gallons/year. [District Rule 3.4/C-10-17]

# P-43-10

The maximum amount of natural gas shall not exceed 20,664 cubic feet/day, 0.172 million cubic feet/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 0.172 million cubic feet year. [District Rule 3.4/C-10-38]

# P-44-10

The maximum amount of diesel consumption shall not exceed 960 gallons/day, 8,000 gallons/1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> calendar quarter, and 8,000 gallons/year. [District Rule 3.4/C-10-45]

# **Work Practice and Operational Requirements - Permit Conditions**

#### P-42-10, P-43-10 and P-44-10

The Permit Holder shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than or equal to 20% opacity. [District Rule 2.3/ C-10-17, C-10-38 and C-10-45]

The Permit Holder shall not operate this internal combustion engine more than 50 hours per calendar year for maintenance and testing purposes, and such operation shall be scheduled in cooperation with the District so as to limit air quality impact. [District Rule 3.4, Title 17 CCR, 40 CFR Part 60.4211 and 40 CFR Part 60.4243/ C-10-17, C-10-38 and C-10-45]

The Permit Holder shall not operate this internal combustion engine more than 200 hours per calendar year. [District Rule 3.4/ C-10-17, C-10-38 and C-10-45]

The Permit Holder shall not operate this internal combustion for the supplying of power to a serving utility for distribution on the grid. [District Rule 3.4/ C-10-17, C-10-38 and C-10-45]

The Permit's Holder operation of this IC engine for reasons other than maintenance and testing purposes shall be limited to actual interruptions of electrical power by the serving utility. [District Rule 3.4/ C-10-17, C-10-38 and C-10-45]

#### P-42-10 and P-44-10

The Permit Holder shall only refuel the IC engine with CARB certified diesel fuel. [District Rule 3.4, Title 17 CCR and 40 CFR Part 60.4207/C-10-17 and C-10-45]

The Permit Holder shall install and maintain a non-resettable hour meter with a minimum display capability of 9,999 hours. [District Rule 3.4, Title 17 CCR and CFR Part 60.4209/C-10-17 and C-10-45]

The Permit Holder shall maintain the engine and control device according to the manufacturer's instructions or alternate procedures approved by the manufacturer. [District Rule 3.4 and 40 CFR Part 60.4206 and 60.4211/C-10-17 and C-10-45]

#### P-43-10

The engine shall only be fired only on Public Utility Commission (PUC) grade pipeline natural gas. [District Rule 3.4/C-10-38]

The Permit Holder shall operate and maintain the engine and control device according to the manufacturer's emission related instructions or alternate procedures approved by or District. [District Rule 3.4 and 40 CFR Part 60.4234 and 60.4243/C-10-38]

# **Record-keeping Requirements - Permit Conditions**

#### P-42-10 and P-44-10

The Permit Holder shall maintain a monthly log of usage that shall list and document the nature of use for each of the following:

a. Emergency use hours of operation;

- b. Maintenance and testing hours of operation;
- c. Hours of operation for emission testing to show compliance with Title 17 CCR, CCR, Section 93115.6(a)(3) and 93115.6(b)(3);
- d. Initial star-up hours;
- e. Fuel use through the retention of fuel purchase records which indicate that the fuel used in the IC engine is CARB certified diesel fuel or an approved ATCM compliant alternative fuel. [District Rule 3.4/C-10-17 and C-10-45]

#### P-43-10

The Permit Holder shall maintain the following records:

- a. All maintenance conducted on the engine; and
- b. Documentation from the engine manufacturer the engine is certified to meet the emission standards. [District Rule 3.4 and 40 CFR Part 60.4235/C-10-38]

The Permit Holder shall maintain a log f the operation hours for the IC engine identifying the type of usage (either maintenance or emergency), the duration and date of each usage. [District Rule 3.4/C-10-38]

# **RULE 3.8** Federal Operating Permits

# **Rule Description**

This rule implements the requirements of Title V of the Federal Clean Air Act as amended in 1990 (CAA) for permits to operate. Title V provides for the establishment of operating permit programs for sources which emit regulated air pollutants, including attainment and non-attainment pollutants. The version of the rule used in this evaluation was adopted on April 11, 2001 and is part of the current California SIP.

# **Compliance Status**

The source is currently in compliance with the requirements of the rule. The source was issued an initial Title V operating permit on November 25, 2003. The District Enhanced NSR program provides that if the provisions of District Rule 3.8, Federal Operating Permits are followed at the time of District Permit for construction, including noticing requirements, then the changes to the Title V Permit are administrative changes after the construction is completed and the District permit is issued.

# **Title V General Requirements - Permit Conditions**

# **Right of Entry:**

The permit shall require that the source allow the entry of the District, ARB, or U.S. EPA officials for the purpose of inspection and sampling, including:

- a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
- b. Inspection and duplication of records required by the permit to operate; and
- c. Source sampling or other monitoring activities. [District Rule 3.8, §302.10]

# **Compliance with Permit Conditions:**

The Permit Holder shall comply with all Title V permit conditions. [District Rule 3.8, §302.11a]

The permit does not convey property rights or exclusive privilege of any sort. [District Rule 3.8, §302.11b]

Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [District Rule 3.8, §302.11c]

The Permit Holder shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition. [District Rule 3.8, §302.11d]

A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [District Rule 3.8, §302.11e]

Within a reasonable time period, the Permit Holder shall furnish any information requested by the APCO, in writing, for the purpose of determining:

- a. Compliance with the permit; or
- b. Whether or not cause exists for a permit or enforcement action. [District Rule 3.8, §302.11f]

# **Emergency Provisions:**

Within two weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:

- a. An emergency occurred;
- b. The Permit Holder can identify the cause(s) of the emergency;
- c. The facility was being properly operated at the time of the emergency;
- d. All steps were taken to minimize the emissions resulting from the emergency; and
- e. Within two working days of the emergency event, the Permit Holder provided the District with a description of the emergency and any mitigating or corrective actions taken; and In any enforcement proceeding, the Permit Holder has the burden of proof for establishing that an emergency occurred. [District Rule 3.8, §302.12]

# **Severability:**

If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of these conditions. [District Rule 3.8, §302.13]

# **Compliance Certification:**

Section 302.14(a) of Rule 3.8 requires "the responsible official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

# **Streamlining Demonstration**

As shown below, the standard annual compliance certification reporting language of Rule 3.8 (Federal Operating Permits), will be streamlined under the provisions of Rule 3.4 to include specific reporting and submittal dates:

The responsible official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. The twelve (12) month period will begin on the date that the Title V permit was originally issued (November 25), and will be due within thirty (30) days after the end of the reporting period, unless otherwise approved in writing by the District. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [District Rule 3.4 and District Rule 3.8, §302.14(a)]

The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of District Rule 3.8. [District Rule 3.8, §302.14b]

The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [District Rule 3.8, §302.14c]

The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [District Rule 3.8, §302.14d]

# **Permit Life:**

The Title V permit shall expire five years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [District Rule 3.8, §302.15]

### **Payment of Fees:**

An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [District Rule 3.8, §302.16]

# **Permit Revision Exemption:**

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit. [District Rule 3.8, §302.22]

#### **Application Requirements:**

An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than 18 months and no later than six months before the expiration date of the current permit to operate. [District Rule 3.8, §402.2]

An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [District Rule 3.8, §402.3]

An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:

- a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
- b. Proposed permit terms and conditions; and
- c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [District Rule 3.8, §402.4]

#### **Permit Reopening for Cause:**

Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:

- a. The need to correct a material mistake or inaccurate statement;
- b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;
- c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is 3 years or greater, no later than 18 months after the promulgation of such requirement (where less than 3 years remain in the authorized life of the permit, the APCO shall incorporate the requirements into the permit to operate upon renewal); or
- d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [District Rule 3.8, §413.1]

#### Monitoring, Testing and Analysis:

No additional monitoring, testing and analysis is required.

#### **Record-keeping:**

The permit holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:

- a. Date, place, and time of sampling;
- b. Operating conditions at the time of sampling;
- c. Date, place, and method of analysis; and

# d. Results of the analysis. [District Rule 3.8, §302.6a]

The permit holder shall retain records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application. [District Rule 3.8, §302.6b]

# **Reporting Requirements:**

Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than 10 days after detection. [District Rule 3.8, §302.7a]

# **Streamlining Demonstration**

Section 302.7(b) of Rule 3.8 requires "A monitoring report shall be submitted at least every six (6) months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8."

# **Streamlining Demonstration**

As shown below, the standard annual compliance certification reporting language of Rule 3.8 (Federal Operating Permits), will be streamlined under the provisions of Rule 3.4 to include specific reporting and submittal dates:

A semi-annual monitoring report shall be submitted at least every six (6) consecutive months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8. The six (6) month period will begin on the date that the Title V permit was originally issued (November 25), and will be due within thirty (30) days after the end of the reporting period, unless otherwise approved in writing by the District. [District Rule 3.4 and District 3.8, §302.7(b)]

All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [District Rule 3.8, §302.7c]

Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [District Rule 3.8, §302.7e]

# 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

# **Rule Description**

The provisions of this subpart apply to manufacturers of specified stationary compression ignition engines and owners and operators of stationary compression ignition engines that commence construction or modify or reconstruct their engine after July 11, 2005. The provisions are applicable to engines commencing construction after July 11, 2005 if the engines are manufactured after April 1, 2006 and are not fire pump engines, or manufactured as a certified National Fire Protection Association (NFPA) fire pump engines after July 1, 2006.

# **Compliance Status**

The rule applies to P-42-10 and P-44-10. The source is currently in compliance with the rule.

# Requirements

#### P-42-10

The engine must meet the following emission standards: 3.0 g/bhp-hr for VOC + NOx, 2.6 g/bhp-hr for CO and 0.15 g/bhp-hr for PM.

#### P-44-10

The engine must meet the following emission standards: 7.3 g/bhp-hr for VOC + NOx, 3.73g/bhp-hr for CO and 0.37 g/bhp-hr for PM.

#### P-42-10 and P-44-10

Additional requirements include: a) the engine and any control device must be maintained according to the manufacturer's instructions or procedures approved by the manufacturer, b) the engine diesel fuel must meet the requirements of 40 CFR 80.510 for nonroad diesel fuel, c) the engine must be installed with a non-resettable hour meter prior to start-up, d) maintenance and readiness testing is limited to 100 hours per year.

# **Streamlining Demonstration**

For emission units P-42-10 and P-44-10 the requirements are streamlined by the following District Rule 3.4 requirement:

- a. The District Rule 3.4 requirement for P-42-10 is an EPA certified Tier 3 engine;
- b. The District Rule 3.4 requirement for P-44-10 is an EPA certified Tier 2 engine;
- c. The Permit Holder shall maintain the engine and control device according to the manufacturer's instructions or alternate procedures approved by the manufacturer;
- d. The Permit Holder shall only refuel the IC engine with CARB certified diesel fuel:
- e. The Permit Holder shall install and maintain a non-resettable hour meter with a minimum display capability of 9,999 hours;
- f. The Permit Holder shall not operate this internal combustion engine more than 50 hours per calendar year for maintenance and testing purposes, and such operation shall be scheduled in cooperation with the District so as to limit air quality impact.

# **Permit Conditions**

The Permit Holder shall comply with the applicable requirements of 40 CFR Part 60 Subpart IIII. [40 CFR Part 60, Subpart IIII and 40 CFR Part 63 Subpart ZZZZ].

# 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

# **Rule Description**

The provisions of this subpart apply to manufacturers of specified stationary spark ignition engines and owners and operators of stationary spark ignition engines that commence construction

or modify or reconstruct their engine after June 12, 2006. The provisions are applicable to engines commencing construction after June 12, 2006 if the engines are manufactured after July 1, 2007 for engines with a maximum engine power greater than 500 HP (except lean burn engines with 500< HP<1,350), after January 1, 2008 for lean burn engines with a maximum engine power 500 < HP < 1,350, after July 1, 2008 for engines with a maximum engine power less than 500 HP or after January 1, 2009 for emergency engines with a maximum engine power greater than 25 HP.

## **Compliance Status**

The rule applies to P-43-10. The source is currently in compliance with the rule.

# Requirements

#### P-43-10

The engine must meet the following emission standards: 7 g/bhp-hr Nox and 289 g/bhp-hr for CO.

Additional requirements include: a) the engine must be operated and maintained to meet the emission requirements, b) maintain records of maintenance for the engine and control device according to the manufacturer's emission related instructions or keep a maintenance plan and records of maintenance and operate the engine in a manner consistent with good air pollution control, c) appropriately maintenance and readiness testing is limited to 100 hours per year, d) air to fuel ratios must be maintained and operated and e) documentation from the manufacturer the engine is certified and meets the emission standards.

# **Streamlining Demonstration**

For emission units P-43-10 the requirements are streamlined by the following District Rule 3.4 requirement:

- a. The Permit Holder shall operate and maintain the engine and control device according to the manufacturer's emission related instructions or alternate procedures approved by the District.
- b. The Permit Holder shall maintain records of all maintenance conducted on the engine;
- c. The Permit Holder shall maintain documentation from the engine manufacturer the engine is certified to meet the emission standards;
- d. The Permit Holder shall not operate this internal combustion engine more than 50 hours per calendar year for maintenance and testing purposes, and such operation shall be scheduled in cooperation with the District so as to limit air quality impact.

#### **Permit Condition**

The Permit Holder shall comply with the applicable requirements of 40 CFR Part 60 Subpart JJJJ. [40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ]

# 40 CFR Part 63, Subpart ZZZZ, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

#### **Rule Description**

The provisions of this subpart apply to owners or operators of stationary reciprocating internal combustion engines at major or area sources of HAPS.

# **Compliance Status**

The rule applies to P-42-10, P-43-10 and P-44-10. The source is currently in compliance with the rule.

# Requirements

#### P-42-10

The engine meets the requirements by meeting the requirements of 40 CFR Part 60 IIII.

## P-43-10

The engine meets the requirements by meeting the requirements of 40 CFR Part 60 JJJJ.

#### P-44-10

The engine meets the requirements by meeting the requirements of 40 CFR Part 60 IIII.

# **Streamlining Demonstration**

# P-42-10 and P-44-10

The Permit Holder shall comply with the applicable requirements of 40 CFR Part 60 Subpart IIII. [40 CFR Part 60, Subpart IIII and 40 CFR Part 63 Subpart ZZZZ]

# P-43-10

The Permit Holder shall comply with the applicable requirements of 40 CFR Part 60 Subpart JJJJ. [40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ]